



METROPOLITAN  
TRANSPORTATION  
COMMISSION

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## *Memorandum*

TO: Planning and Operations Committee

DATE: June 13, 2003

FR: Executive Director

W.I.: 1212

RE: Performance Measures for Transportation 2030 Plan (2005 RTP)

SB 1492 (Statutes of 2002) sets up new requirements for MTC to evaluate projects prior to their inclusion in the new Regional Transportation Plan, called the Transportation 2030 Plan. This is a challenging assignment given the potentially large number of projects of interest and the wide ranging scope of projects that MTC will need to consider. We have developed a set of project performance measures through a collaborative process using a joint committee of the Partnership Technical Advisory Committee and the MTC Advisory Council. Attached for your review and referral to the Commission for approval is Resolution No. 3564, which addresses the main requirements of the legislation:

1. MTC must adopt goals and measurable objectives for RTP corridors.
2. MTC must establish performance measurement criteria at the project and corridor level by July 1, 2003.

(See Attachment A for the full text of the legislation.)

The results of MTC's evaluation will be considered by Congestion Management Agencies (CMAs) prior to submitting their projects to MTC in May 2004 for inclusion in the Transportation 2030 Plan. Members of the public can submit projects for evaluation, provided they meet certain screening criteria. When submitting new projects in May, the CMAs will also be asked to submit a written narrative of how the evaluation results were used.

### **Corridor Goals and Objectives**

The performance measure committee considered developing specific goals and transportation objectives for each corridor, but ultimately settled on using the existing RTP Goals and a common set of corridor objectives that would apply to all corridors. These "universal" corridor objectives are shown in Attachment B. At the same time, the Transportation 2030 Plan will continue to develop more tailored management objectives for each of the transportation corridors in the RTP, similar to past regional transportation plans, to provide a clear statement about how existing and future travel needs will be addressed.

### **Performance Measurement Criteria and Evaluation**

The major focus of the effort was to identify how performance would be evaluated, both at the individual project level as well as the corridor level. The overall intent was to identify project and corridor benefits and their associated costs. Our proposed approach has two main elements described below and detailed in Attachment C.

1. Project Needs Assessment – Projects are proposed and developed in response to some identified transportation need. MTC would use transportation conditions in 2025 as the basis for this

evaluation (assuming all projects in the 2001 RTP are implemented). The information would be derived from MTC's travel demand model. In addition to being able to quantify a number of the performance measures, this approach has the advantage of providing consistent information for a wide range of projects and programs. The ability of projects to address these needs would be rated on a consistent scale, e.g., high/medium/low. A large number of measures have been identified and are presented in Attachment C, which underscores the complexity of the process we are undertaking.

2. Corridor Benefits Analysis – The benefits of projects proposed for inclusion in the transportation plan would be the second major element of the performance analysis and also involve use of MTC's travel demand model. MTC would assemble up to three packages of projects within a corridor and forecast how these projects affect travel conditions in 2025. We propose this approach because it would be difficult to discern the benefits of individual investments and because the legislation calls for corridor-level analysis. The major benefits that would be reported would be: savings in travel time and costs (persons and freight), changes in accessibility within a corridor (average travel time from trip origin to trip destination), and vehicle emissions (ozone precursors and particulate matter).

The results of the evaluation would be presented along with cost information on individual projects and corridor packages. This information will include total and annualized capital cost and total and net annual operating cost.

### **What Projects Will be Evaluated?**

MTC and the CMAs would jointly screen projects and programs proposed for evaluation by public agencies as well as the public at large. Attachment D provides the major screening criteria. Projects assigned discretionary funds in the 2001 RTP (i.e. "Track 1" projects) would be subject to evaluation only if there were a significant change in scope or cost to be funded by RTP revenues (a 30 percent change in RTP cost, excluding inflation). Maintenance and rehabilitation programs for which cost increases are based on new methodology would not be subject to evaluation. Projects for which a willing sponsor has not been identified would still be eligible for evaluation; however, a willing and eligible sponsor must be identified by February 2004 in order for the project to be eligible for inclusion in the Transportation 2030 Plan.

### **Schedule**

Because many CMAs are in the process of developing new countywide plans and potential project ideas, we will need to continue to work with them through June on developing a detailed schedule. In general it is our intent to complete the evaluation of projects and corridor benefits by early 2004, so the results are available for the CMA-led RTP outreach in the spring.

A summary of significant issues raised in our discussions with the joint P-TAC/Advisory Council Committee is included in Attachment E. We believe the proposal before you for approval today satisfactorily addresses most of the issues that have been raised, and recommend your approval of MTC Resolution No. 3564.

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Steve Heminger

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**Attachment A**  
**Legislative Requirement Added by SB 1492**

CALIFORNIA GOVERNMENT CODE  
SECTION 66535

66535. (a) Not later than July 1, 2003, the commission shall establish performance measurement criteria on both a project and corridor level to evaluate all new transportation projects and programs (investments) that have not yet been identified as "Track One Investments" in the 2002 regional transportation plan. These performance measures shall apply to proposed projects, and the impact those projects will have on their respective corridors. The commission shall utilize these performance measurements to evaluate and prioritize alternative transportation investments in order to meet the goals and objectives for each corridor for inclusion in the 2004 regional transportation plan.

(b) The commission shall adopt goals and measurable objectives for planning corridors and subcorridors delineated by the commission. These goals and objectives shall be compatible and consistent with the requirements of the performance measurement criteria established by the commission pursuant to subdivision (a) for inclusion in the 2004 regional transportation plan.

(c) Any costs associated with this section incurred by the commission shall be paid solely from funds provided pursuant to Section 99233.2 of the Public Utilities Code. If there is insufficient funding from this source, the commission is not required to perform the functions described in this section.

## **Attachment B**

### **Universal Corridor Objectives**

#### ***Maintain the existing system***

- Reduce maintenance and rehabilitation shortfalls

#### ***Improve System Safety***

- Minimize injuries and loss of life in event of seismic failure or collisions/other safety incidents

#### ***Accommodate growth in person and freight travel while preserving or improving travel time***

- Operate the system more efficiently
- Operate the system more reliably
- Increase capacity and reduce bottlenecks through strategic expansion

#### ***Increase convenience for persons and freight***

- Improve system connectivity by adding new links to the transportation network, adding new points of connection or improving existing points of connection.
- Improve access to the regional transportation system
- Operate the system with greater attention to customer service (Be more customer-oriented)

#### ***Maximize external benefits and minimize disbenefits***

- Protect the environment/public health
- Support community vitality through transportation improvements that improve mobility and accessibility within communities
- Address transportation needs of region's most disadvantaged households

**Attachment C**  
**Performance Measures for Transportation 2030**

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**MEASURES FOR PROJECT NEEDS ASSESSMENT**

<b>Objective Category/ Aspect Measured</b>	<b>Performance Criteria/ Measurement</b>
<b>Improve safety</b>	
<ul style="list-style-type: none"> <li>Seismic safety</li> </ul>	Number of persons at risk in event of failure in 2025 <i>Number of daily facility users (persons)</i>  Is project on Caltrans lifeline system? (state highways only)
<ul style="list-style-type: none"> <li>Collisions (all modes) and transit security</li> </ul>	Recent incident history <i>Average number of incidents or incident rate over past three years*</i>
<b>Maintain the system</b>	
<ul style="list-style-type: none"> <li>Roadway maintenance</li> </ul>	Future wear and tear on roads <i>Total vehicle miles traveled and truck vehicle miles traveled in 2025</i>
<ul style="list-style-type: none"> <li>Transit maintenance</li> </ul>	Future wear and tear on transit system <i>Passenger miles per vehicle plus vehicle miles per vehicle in 2025</i>
<b><i>Accommodate growth in person and freight travel from now until 2025 and preserve or improve travel time</i></b>	
<ul style="list-style-type: none"> <li>Make existing capacity more reliable</li> </ul>	Roadways – Crowding in 2025 <i>Peak period volume to capacity ratio</i>  Transit – On-time performance <i>Future on-time performance rate based on record over past three years and 2025 operating conditions (deterioration in bus speeds)</i>
<ul style="list-style-type: none"> <li>Make more efficient use of existing capacity</li> </ul>	Roadways – Crowding in 2025 <i>Peak period volume to capacity ratio (report separately for HOV lanes and major truck routes)</i>
<ul style="list-style-type: none"> <li>Construct/create new capacity</li> </ul>	Transit – Crowding in 2025 <i>Peak period transit load factor (passengers/seats)</i>

\* Data to be provided by project proposer

**Attachment C**  
**Performance Measures for Transportation 2030**

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<b>Objective Category/ Aspect Measured</b>	<b>Performance Criteria/ Measurement</b>
<b>Increase user convenience</b>	
<ul style="list-style-type: none"> <li>Improve connectivity</li> </ul>	<p>New connections – Qualitative assessment of gap or connectivity in local or regional plan. If not in a plan, describe deficiency.*</p> <p>Improved connection points (transit transfer points, highway-to-highway interchanges/intersections)</p> <p>Transit – levels of connecting services in 2025</p> <p><i>Rate of connecting services (e.g. buses/hour and trains/hour)</i></p> <p>Roadways – level of activity at connections in 2025</p> <p><i>Number of vehicles using connection</i></p>
<ul style="list-style-type: none"> <li>Improve access for passengers to regional transportation network</li> </ul>	<p>Transit – Transit station boardings in 2025</p> <p><i>Daily boardings at major transit terminals</i></p> <p>Roadways – Population and job growth from today to 2025 in areas adjacent to highways</p>
<ul style="list-style-type: none"> <li>Improve access from ports and airports to the regional transportation network</li> </ul>	<p>Projected growth in cargo and air passengers from today to 2025*</p> <p><i>Increase in port cargo volume, air freight tonnage and air passengers</i></p>
<ul style="list-style-type: none"> <li>Customer service improvements</li> </ul>	<p>Deficiencies identified through formal evaluation process*</p>
<b>External benefits</b>	
<ul style="list-style-type: none"> <li>Air Quality</li> </ul>	<p>Daily emissions in corridor in 2025 (ozone and particulate matter)</p> <p>Is project a state or federal TCM?</p>
<ul style="list-style-type: none"> <li>Noise Reduction</li> </ul>	<p>Traffic volume and speed in 2025</p>
<ul style="list-style-type: none"> <li>Equity</li> </ul>	<p>Is project intended to serve an identified community of concern from RTP equity analysis?*</p> <p>Is project an identified Lifeline transit route?*</p> <p>Is project intended to revitalize an urban area?*</p> <p>Is project from a community-based transportation plan?*</p>
<ul style="list-style-type: none"> <li>Community Vitality</li> </ul>	<p>Does project enable community residents to use a range of modes (bicycle, walk, transit) to access daily activities within the community?*</p> <p>Does project support a community's development and/or redevelopment activities?*</p>

\* Data to be provided by project proposer

**Attachment C**  
**Performance Measures for Transportation 2030**

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**MEASURES FOR CORRIDOR BENEFITS ANALYSIS**

<b>Corridor Benefit</b>	<b>Performance Criteria <i>Measurement</i></b>
<i>Mobility</i>	User benefit <i>Value of travel time savings plus out-of-pocket cost savings for the alternative compared to the 2001 RTP, total and per trip</i>
<i>Accessibility</i>	Change in average travel time <i>All trips within corridor by mode AM and midday for each alternative compared to the 2001 RTP</i>
<i>Emissions</i>	Change in emissions (ozone and particulate matter) <i>Use EMFAC2002 to calculate change in daily emission levels from vehicle trips and VMT for each alternative compared to the 2001 RTP</i>

\* Data to be provided by project proposer



## **Attachment D**

### **Screening Criteria**

- Investment is not defined sufficiently to generate sketch level data for evaluation. (Minimum requirements will be defined.)
- Investment is proposed to replace an existing Track 1 project, unless sponsor wishes to withdraw project from Track 1.
- Investment was studied and rejected in a recently completed corridor/major investment study.
- The cost of the investment is not reasonable in proportion to estimated new county Track 1 funds (i.e. a single project should not require more than 40% of estimated Track 1 funds; threshold may be higher in small counties with small amounts of new Track 1 funding.)
- There is not a reasonable guarantee of operating funds.
- Investment has a fatal environmental flaw.
- Investment requires a change in law or regulations to be funded or implemented, unless there is a reasonable expectation that such a change may be enacted.
- Proposal is a broad policy (e.g. value pricing, smart growth) rather than a project

**Attachment E**  
**Summary of Issues Raised in Discussions**

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Comment/Issue Raised	Response
<b><i>Overall approach</i></b>	
<ul style="list-style-type: none"> <li>Since the legislation exempts projects in the 2001 RTP, why is MTC staff recommending that some projects be subject to re-evaluation?</li> </ul>	<p>MTC has proposed that projects with a significant change in RTP cost be reevaluated, since this is a substantial change in the assumptions leading to their inclusion in the 2001 RTP. A significant change in cost is defined to be an increase of more than 30% (excluding inflation) only applies to the portion of discretionary new funding referred to in the past as Track 1.</p>
<ul style="list-style-type: none"> <li>Will MTC be able to evaluate the very large number of projects that may be submitted?</li> </ul>	<p>Since this is a new process, we do not know how much effort will be required. Our initial approach to managing the work load is to exempt low cost projects (total cost less than \$5-\$10 million) so the evaluation can focus on the more significant new investments. In Track 1 of the 2001 RTP, projects under \$10 million accounted for 34% of all projects and less than 2% of total RTP investment. MTC is also suggesting that the dollar value of projects in each county be capped at twice the projected new RTP funding.</p>
<ul style="list-style-type: none"> <li>Some CMAs have expressed interest in conducting some or all of the evaluation</li> </ul>	<p>We do not believe this is workable, since the legislation requires MTC to perform the evaluation and we need regionwide consistency. However, we are open to receiving CMA supplied data that could help with the evaluation.</p>
<ul style="list-style-type: none"> <li>The project-level needs assessment is too much work and doesn't tell us how a specific project will perform in addressing a problem. As such, the approach is not responsive to the legislation.</li> </ul>	<p>The needs assessment gets at the purpose of the project because it identifies conditions and needs in the transportation system (either current or 2025) and the relationship between projects and the identified conditions. The second step is determining the project's contribution to solving the problem, and our approach would get at this through the corridor benefit analysis. This combined approach allows us to meet the legislative requirement.</p>
<b><i>Screening criteria</i></b>	
<ul style="list-style-type: none"> <li>Objection to criterion that excludes projects that would replace 2001 RTP projects, except when the sponsor of an existing 2001 RTP project wishes to delete it from the 2005 RTP.</li> </ul>	<p>The legislation recognizes existing project commitments made in the 2001 RTP in so far as it exempts them from the evaluation requirement. Furthermore, the job of evaluating alternatives to projects in the 2001 RTP in addition to evaluating an entire new set of projects would be unmanageable.</p>
<ul style="list-style-type: none"> <li>Objection to criterion that excludes projects that have been rejected in major corridor study.</li> </ul>	<p>Corridor studies bring significant resources to evaluating alternative transportation investments which cannot be matched in this type of RTP project analysis. Also these corridor studies usually have extensive public and elected official involvement, and MTC must recognize the results of these processes as legitimate and not second guess past decisions.</p>

**Attachment E**  
**Summary of Issues Raised in Discussions**

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Comment/Issue Raised	Response
<ul style="list-style-type: none"> <li>Objection to screening criterion that excludes projects on the basis of needing changes in existing laws or regulations. This would prohibit us from considering congestion pricing/HOT lane projects.</li> </ul>	<p>This is a direct result of federal regulations that seek to make long range plans realistic in terms of financial and other assumptions. The air quality conformity process has similar requirements. Federal Legislation that is more permissive with respect to HOT lanes is under consideration and would allow such projects to be evaluated and possibly later included in the RTP.</p>
<ul style="list-style-type: none"> <li>Request inclusion of screening criterion that projects must have eligible, willing sponsor identified in order to be evaluated.</li> </ul>	<p>A project would not need to have a sponsor in order to be evaluated; however, a willing, eligible sponsor must be identified by February 2004 in order for the project to be considered for inclusion by the CMAs for the financially constrained Track 1 lists. Projects that rate well and do not have a sponsor could be identified for further study.</p>
<b>Measures</b>	
<ul style="list-style-type: none"> <li>Concern that user benefits measure will not be valid because model does not have a land use feedback loop and does not reflect induced demand</li> </ul>	<p>The performance evaluation needs to use existing tools. Refinements to MTC's travel model will be considered in the future, based on new information from the 2000 Census and MTC's own household travel survey.</p>
<b>Process</b>	
<ul style="list-style-type: none"> <li>How will we handle projects that would seek RTP funds if included in new sales tax measures passed in 2004?</li> </ul>	<p>It is important to identify potential sales tax projects by the fall so they can be included in the evaluation.</p>
<ul style="list-style-type: none"> <li>How will we handle candidate RTP projects that are identified later?</li> </ul>	<p>Given the lead time necessary to model the packages of projects for the corridor benefits analysis, our ability to evaluate projects identified beyond November 2003 will be limited.</p>
<ul style="list-style-type: none"> <li>Will there be an opportunity to review how proposed RTP projects are packaged for the corridor benefits analysis?</li> </ul>	<p>Yes. We would convene the joint P-TAC/MTC Advisory Council Committee to review the packages of new RTP before initiating the modeling.</p>
<ul style="list-style-type: none"> <li>What if a project rates poorly in the evaluation but is still a high CMA priority? Can such a project be still be considered for inclusion in the RTP?</li> </ul>	<p>Yes. The CMAs may submit additional information concerning important aspects of a project that may not be captured in the evaluation process. At any rate, the legislation does not require the Commission to establish performance standards that would set a threshold for including projects in the RTP. The performance measures are intended to inform – but not replace – the Commission's decision-making role in adopting the RTP.</p>